



Thermistor Strings



RST Instruments manufactures thermistor string assemblies that are environmentally hardened to provide accurate and reliable long-term measurements under demanding geotechnical conditions. The strings incorporate interchangeable, curve tracking, negative temperature coefficient (NTC) thermistors. As the thermistors are curve matched to desired temperature tolerance over selected temperature ranges, this permits the use of multiple sensors with a single readout or data logger, eliminating costly calibration procedures.

RST thermistor strings are custom manufactured to user specifications: cable length, thermistor number, accuracy, and location on the string. Resistance to the ingress of water is insured by a triple encapsulation procedure. Standard cable employed is a heavy duty, direct burial rated 22 gauge water blocked instrumentation cable.

Other cable types are available to suit site-specific requirements. Readout instruments are available, ranging from hand held devices to complete data logger systems.

A bussed digital version is also available, please see RST's Digital ThermArray brochure.

specifications

| ITEM | DESCRIPTION |
|--------------------------------|--|
| Interchangeability Tolerance | ±0.1°C |
| Interchangeability Temp. Range | 0°C to +75°C |
| Operating Temp. Range | -80°C to +75°C |
| Stability | 0.01°C or better /100 months at 0°C |
| Resistance at 25° | 2252, 3k, 5k, 10k ohms |

dimensions

| THERMISTOR STRING MEASURING POINTS | | CABLE DIAMETER | | HOUSING DIAMETER | |
|------------------------------------|-------|----------------|------|------------------|-------|
| POINTS | PAIRS | MM. | IN. | MM. | IN. |
| 1-2 | 2 | 6.9 | 0.27 | 9.5 | 0.375 |
| 3 | 3 | 7.6 | 0.27 | 12.7 | 0.500 |
| 4-6 | 6 | 9.9 | 0.30 | 12.7 | 0.500 |
| 7-12 | 12 | 12.0 | 0.47 | 15.9 | 0.625 |
| 13-18 | 18 | 13.5 | 0.53 | 15.9 | 0.625 |
| 19-25 | 25 | 15.0 | 0.59 | 19.0 | 0.750 |

ordering info

- Accuracy required.
- Cable length.
- Cable termination enclosures.
- Readout and datalogger.
- Quantities and required thermistor spacing per string.
- Method of cable termination.
- Special environmental conditions which may require non-standard cable, such as acidic mine tailings.



RST Instruments Ltd.

11545 Kingston St.,
Maple Ridge, BC
Canada V2X 0Z5

Telephone: 604 540 1100
Facsimile: 604 540 1005
Toll Free: 1 800 665 5599

info@rstinstruments.com

www.rstinstruments.com

features

- High reliability, ensured by triple encapsulation.
- Precision matched, interchangeable thermistors.
- Pre-assembled to specific length and spacing.
- Heavy duty, direct burial cable standard.